a) classifying the various subgroups of the disease, said subgroups being classified based on pathology, pathogenic agent, cause or symptoms, on an n-bit data word stored in a memory;

b) defining the clinical tests suitable for confirming the diagnosis of each of the subgroups classified in a);

c) selecting to run only the clinical tests listed in b) for the sub-group showing an abnormality thereby not allowing unnecessary clinical tests to be carried out in duplicate or to be ordered by an outside operator, and comparing the result obtained with the normal value provided on the n-bit data word;

d) sequentially running the relevant clinical test of each of the sub-groups upon receiving a first of said clinical test values, and computing the next set of said clinical test for further testing, and

e) repeating steps c) and d) until a complete diagnosis of the specific disease type and group is provided, thereby avoiding unnecessary clinical tests and expensive duplicative procedures, while enabling an accurate diagnosis using the disease-specific diagnostic algorithm.

C1

C2 SUB D2

21. (Twice Amended) An apparatus for pipelining a diagnostic algorithm on an n-bit data word, said apparatus comprising:

a) a memory storing component, said component used for storing the n-bit data words relevant to a set of m clinical tests;

b) means for sequentially reading out each of a m clinical tests of the n-bit data from said memory such that only said clinical tests are run thereby not allowing unnecessary duplication of tests or unauthorized tests to be ordered by an outside operator, wherein m is an integer greater than one; and

c) a processor for sequentially programming each of the m clinical tests to produce a complete diagnosis, and for outputting the result.

Applicant has submitted herewith the following items:

1) A clean version of the amended claims under 37 C.F.R. 1.121.

2) A marked-up copy of the amended claims under C.F.R. 1.121.